DENGUE CASE INVESTIGATION FORM

NCIMS ID:	Date of notification: ___ / ___ / ___	Date of interview: ___ / ___ / ___

DEMOGRAPHIC DETAILS

First Name:	**Surname:**	**DOB:**
Address:	**Suburb:**	**Postcode:**
Phone (home):	**Phone (mobile):**	**Email:**
Indigenous status: ☐ Aboriginal ☐ Torres Strait Islander ☐ Neither	**Country of birth:** ☐ Australia ☐ Other:	**Language:** ☐ English ☐ Other:
Interpreter required for case interview: ☐ Yes ☐ No Job Number:		

LABORATORY EVIDENCE

1. Isolation of dengue virus by culture *'Dengue virus culture'*	☐ Yes ☐ No	Specimen type: ☐ Serum ☐ Other:	Collection date: ___ / ___ / ___	
2. Detection of dengue virus by nucleic acid testing (PCR) *'Dengue virus PCR'*	☐ Yes ☐ No	Specimen type: ☐ Serum ☐ Other:	Collection date: ___ / ___ / ___	
3. Detection of dengue non-structural protein (NS1) *'Dengue virus antigen'*	☐ Yes ☐ No	Specimen type: ☐ Serum ☐ Other:	Collection date: ___ / ___ / ___	
4. Detection of dengue antibody in serum *'Dengue virus IgM/IgG antibody IA'*	☐ Yes ☐ No	**Sample 1:** Collection date: __ / __ / ___ ☐ IgM detected Titre: _____ ☐ IgG detected Titre: _____ ☐ TAb* (total Ab) detected	**Sample 2:** Collection date: __ / __ / ___ ☐ IgM detected Titre: ____ ☐ IgG detected. Titre: ____ ☐ TAb (total Ab) detected	**Assessment:** ☐ No significant changes ☐ IgG seroconversion ☐ Significant rise in Ab ☐ x4 or greater rise in IgG
5. Detection of dengue IgM antibody in cerebrospinal fluid *'Dengue virus IgM antibody IA'*	☐ Yes ☐ No	Results: ☐ Dengue IgM detected.	Other results: ☐ Zika IgM negative ☐ MVE IgM negative ☐ West Nile / Kunjin virus IgM negative ☐ Japanese encephalitis (JE) virus IgM negative	
6. Dengue serotype (1-4): _____ (If known)		Detected by: ☐ Culture ☐ PCR ☐ IgM IA ☐ Other:		
7. Specimen(s) sent to arbovirus reference lab (ICPMR or QHFSS) for parallel testing or confirmation? ☐ Yes ☐ No Date sent: ___ / ___ / ___				

Note: *Confirmation of the result by an arbovirus reference laboratory is recommended if infection is believed to have been acquired in Australia. Laboratory evidence alone is not sufficient to meet either the Confirmed or Probable case definitions (see page 2)*
**Total Ab (Tab) is IgM plus IgG. If the report states that IgM was not detected but 'TAb' was detected this indicates that IgG was detected.*

CLINICAL EVIDENCE

8. Did the person have symptoms?	☐ Yes ☐ No	Symptom onset date: ____ /____ / _____ Duration of symptoms: _____ (days)			
Symptoms:		**Symptoms**:			**Comments:**
Abnormal bruising / bleeding	☐ Yes ☐ No	Headache	☐ Yes	☐ No	
Abnormal taste	☐ Yes ☐ No	Myalgia	☐ Yes	☐ No	
Anorexia (loss of appetite)	☐ Yes ☐ No	Nausea	☐ Yes	☐ No	
Arthralgia	☐ Yes ☐ No	Rash	☐ Yes	☐ No	
Diarrhoea	☐ Yes ☐ No	Retro-orbital pain	☐ Yes	☐ No	
Fever	☐ Yes ☐ No	Vomiting	☐ Yes	☐ No	
Other symptoms	☐ Yes ☐ No	Details:			

Note: *Severe dengue includes circulatory shock (dengue shock syndrome) and/or severe bleeding (dengue haemorrhagic fever), and occurs in less than 5% of all cases of dengue. It is more common in cases where there is re-infection with a different dengue strain.*

EVENT OUTCOME

9. Was the person hospitalized?	☐ Yes ☐ No	Details:	
10. Outcome:	☐ Alive ☐ Dead ☐ Unknown	Date of death: / /	(if applicable)
11. Place of disease acquisition	☐ Outside of Australia ☐ In Australia, outside of NSW* ☐ In NSW* ☐ Unknown		
12. Country of disease acquisition	(Regions can also be selected, e.g. South-East Asia)		

**** Note:*** *If a case is believed to have been acquired in NSW or elsewhere in Australia, contact CD OnCall immediately.*

TRAVEL AND RISK INFORMATION

13. During the exposure period (3-14 days prior to onset of symptoms) did the case travel *:		
Overseas travel	☐ Yes ☐ No	**If Yes, overseas travel details:** Countries/cities/towns visited, arrival/departure dates Place _____ Dates: __/__/__ to __/__/__ Place _____ Dates: __/__/__ to __/__/__ Place _____ Dates: __/__/__ to __/__/__ Place _____ Dates: __/__/__ to __/__/__
To Queensland **	☐ Yes ☐ No	
Interstate (other than QLD) **	☐ Yes ☐ No	
In NSW, outside local area	☐ Yes ☐ No	

Note: ** Use travel information to complete the most likely **Place of Acquisition** field in NCIMS (Clinical); enter travel details in Risk History.*
*** If Travel to Queensland or northern Australia, complete Q.20 under Additional Travel Information (Page 3) and notify NSW CD OnCall.*

14. During the viraemic period (1 day prior to onset of symptoms to 12 days after onset) did the case travel to:		
North QLD (north of Bundaberg) or Central QLD (north of Toowoomba) [i.e. *Dengue-receptive zone]*	☐ Yes ☐ No	*If Yes, complete Q.21 under Additional Travel Information (Page 3) and notify NSW CD OnCall.*

***Note**: The usual viraemic period is approximately 5 days. This is extended to 12 days for public health purposes for outbreak risk.*

IMPORTANT RISK ADVICE FOR THE CASE

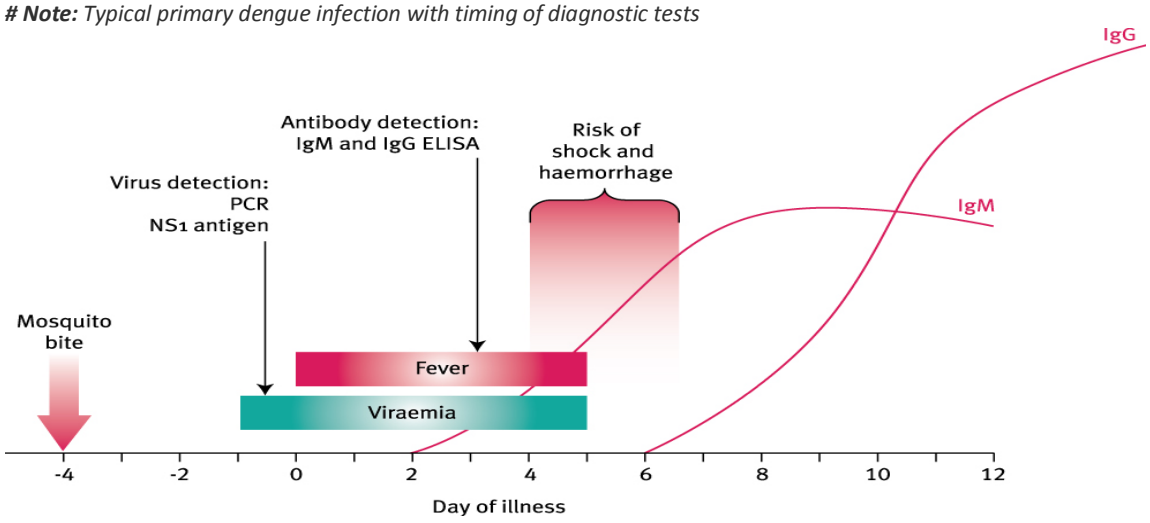
- There are 4 strains of dengue virus. Infection with one strain does not provide protection against other strains. A new infection with another dengue strain increases the risk of severe dengue.
- To reduce the risk of infection, all travellers to dengue risk areas should stay in accommodation with screened windows and doors, wear loose fitting clothing that covers the arms and legs and apply insect repellent to exposed skin, especially during daylight hours and in the early evening. This is particularly important for people who have had a previous dengue infection.
- People with dengue should defer travel to North Queensland (north of Bundaberg) or Central Queensland (north of Toowoomba) until at least 12 days after their symptom onset to prevent infection of the type of mosquitoes able to cause local outbreaks.

15. Information discussed	☐ Yes	☐ No
16. Advised not to donate blood until 4 weeks after full recovery	☐ Yes	☐ No
17. Advised not to travel to North or Central Queensland until 12 days after onset	☐ Yes	☐ No
18. Fact sheet sent via email	☐ Yes	☐ No
19. NCIMS updated	☐ Yes	☐ No

DENGUE CASE DEFINITIONS

A CONFIRMED dengue case requires:	***A PROBABLE dengue case requires:***
• *Laboratory definitive evidence **AND** clinical evidence.*	• *Laboratory suggestive evidence **AND** clinical evidence **AND** epidemiological evidence.*
Laboratory definitive evidence (one or more) # • *Isolation of dengue virus by culture* • *Detection of dengue virus by nucleic acid testing (PCR)* • *Detection of dengue non-structural protein 1 (NS1) antigen in blood* • *IgG seroconversion or a significant increase in antibody level or a fourfold or greater rise in titre to dengue virus* • *Detection of dengue virus-specific IgM in cerebrospinal fluid, in the absence of IgM to MVE, West Nile virus / Kunjin, or JE viruses* ***Clinical evidence*** • *A clinically compatible illness (e.g. fever, headache, arthralgia, myalgia, rash, nausea, and vomiting)*	***Laboratory suggestive evidence*** • *Detection of dengue virus-specific IgM in blood (serum)** ***Clinical evidence*** • *Same as for a confirmed case* ***Epidemiological evidence*** • *A plausible explanation, e.g. travel to a country with known dengue activity OR exposure in Australia where local transmission has been documented within the previous month.* ***Note**: If repeat testing fails to show an IgG response, the IgM positive result is likely a false positive. Consider excluding the case.*

***# Note:** Typical primary dengue infection with timing of diagnostic tests*



ADDITIONAL TRAVEL INFORMATION (if required)

20. Queensland or Northern Australia travel information during the incubation period

	Fly Screens?	Air Con?	Mosquitoes?
Home Address: _____	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No
Work Address: _____	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No
Other significant daytime address:			
1. _____	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No
2. _____	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No
3. _____	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No

21. Queensland Dengue-Receptive Zone travel during the viraemic period

	Fly Screens?	Air Con?	Mosquitoes?
Home Address: _____	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No
Work Address: _____	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No
Other significant daytime address:			
1. _____	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No
2. _____	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No
3. _____	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No

ADDITIONAL NOTES: